

CLAIMS

1. A method for surface treating the surface (11') of a metal, in which the surface treatment is performed in a surfacing chamber (33), using a surfacing material (10), which is formed of one or more compounds and possible additives, and in which
- the surfacing material (10) is brought to a principally gaseous state,
 - the surfacing material (10) is led to the chamber (33), and
 - the surfacing material (10) is permitted to react with the metal surface (11') being treated,
- characterized in that the metal surface (11') being treated is subjected in the chamber (33) to a passing flow of the surfacing material (10), and in which the said surfacing material (10) comprises compounds arising in dry distillation of deciduous-wood.
2. A method according to Claim 1, characterized in that the surfacing material is formed in the point of application from at least two fractions, of which the first fraction includes compounds (BIRCH-TAR(1)) condensed in the said dry distillation process and the second fraction includes uncondensed compounds (CO(g), H₂(g), CO₂(g)).
3. A method according to Claim 2, characterized in that when the surfacing material (10) is formed, part of the compounds included in the surfacing material (10) are brought to the process in a solid state.
4. A method according to any of Claims 1 - 3, characterized in that part of the surface (28') being treated can comprise at least part of the internal surface of the said chamber (33).
5. A method according to any of Claims 1 - 4, characterized in that the surface-treatment process includes in addition one or

more intermediate scavenging stages, in order to at least dry the surface layer (11', 28').

6. A method according to any of Claims 1 - 5, characterized in that at least part of the surface (11', 28') being treated and of the surfacing material (10) are charged electrically to different potentials, in order to bring the surfacing (10) to the surface (11', 28') being surfaced.

10 7. A method according to any of Claims 1 - 6, characterized in that at least part of the wall of the surfacing chamber (33) is charged electrically to a different potential relative to the surfacing material (10), the surface (28') being surfaced being part of the wall of the chamber (33).

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8. Equipment to be used in the method according to Claim 1 for surface treating a metal surface (11'), which includes

20 - means (14, 13) for manufacturing a surfacing material (10), such as, for example, bringing it into a gaseous state,

- a surfacing chamber (33) equipped with at least one input connection (17), in which the metal surface (11') to be surface treated is arranged and

25 - surfacing material (10) feed piping (16) fitted between them, which is connected to the said input connection (17) of the surfacing chamber (33), as well as

30 - possible auxiliary and storage equipment (CTRL, 24, 21.1, 21.2, 22, 18), for example for regulating the process quantities and controlling the surfacing process,

characterized in that at least one exit connection (29) is arranged in the surfacing chamber (33), through which the said gaseous surfacing material (10) is arranged to be led out of
35 the chamber (33).

9. Equipment according to Claim 8, characterized in that the wall structure of the surfacing chamber (33) is arranged from an elastic material, so that it can be advantageously arranged according to the shape of the surface (28') being surfaced.

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10. Equipment according to Claim 8 or 9, characterized in that the wall structure is assembled from units attached to each other.

10 11. Equipment according to any of Claims 8 - 10, characterized in that at least the surfacing chamber (10) is arranged as a moveable unit, in order to arrange continuous surfacing.

12. A surfacing material (10) for use in the method according
15 to Claim 1 for surface treating a metal surface, in which the said material (10) is formed from one or more source materials, by bringing them into a gaseous state and mixing them to form a single surfacing material, characterized in that the said surfacing material (10) is compound arising in dry distillation
20 of deciduous-wood.

13. A surfacing material according to Claim 12, characterized in that the surfacing material is gasified directly from the wood material (BIRCH(s)).

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14. A surfacing material according to Claim 12, characterized in that the surfacing material (10) is arranged to be formed from at least a gaseous fraction (CO(g) , $\text{H}_2\text{(g)}$, $\text{CO}_2\text{(g)}$) and a liquid fraction (BIRCH-TAR(l) , $\text{H}_2\text{O(l)}$).

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15. A surfacing material according to Claim 14, characterized in that the surfacing material (10) is additionally formed from a solid fraction.